

GDP and the Economy

Third Estimates for the Fourth Quarter of 2016

REAL GROSS domestic product (GDP) increased 2.1 percent at an annual rate in the fourth quarter of 2016, according to the third estimates of the national income and product accounts (NIPAs) (chart 1 and table 1).¹ The third estimate of real GDP growth for the fourth quarter was revised up 0.2 percentage point from the second estimate of 1.9 percent. With the third estimate, the general picture of economic growth remains the same; consumer spending increased more than previously estimated.

The fourth-quarter increase in real GDP primarily reflected positive contributions from consumer spending, inventory investment, residential fixed investment, nonresidential fixed investment, and state and local government spending that were partly offset by negative contributions from exports and federal government spending. Imports, which are a subtraction in the calculation of GDP, increased.²

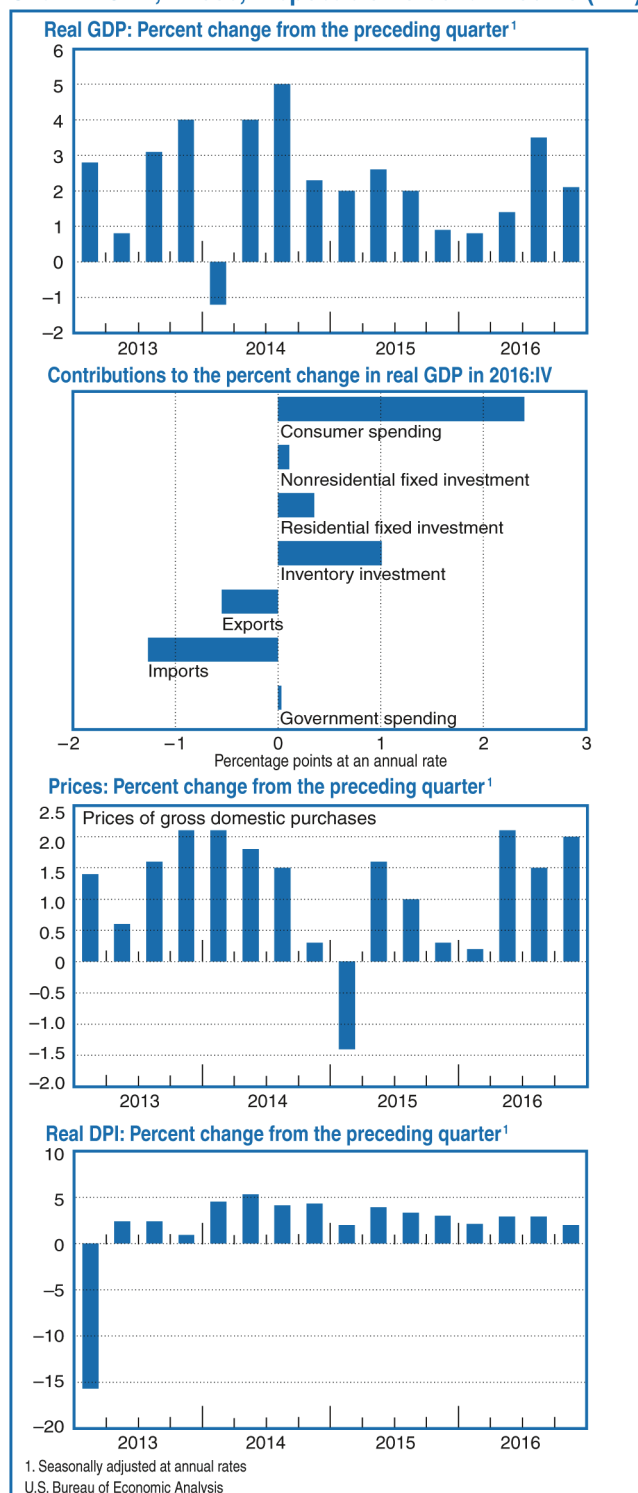
- Prices of goods and services purchased by U.S. residents increased 2.0 percent in the fourth quarter after increasing 1.5 percent in the third quarter. Energy prices increased more in the fourth quarter than in the third quarter, and food prices decreased less. Excluding food and energy, prices increased 1.6 percent after increasing 1.7 percent.
- Real disposable personal income increased 2.0 percent in the fourth quarter after increasing 2.9 percent in the third quarter.
- Profits from current production (corporate profits with inventory valuation adjustment and capital consumption adjustment) increased \$11.2 billion in the fourth quarter; in the third quarter, profits increased \$117.8 billion (table 3).
- Real gross domestic income increased 1.0 percent after increasing 5.0 percent.

1. "Real" estimates are in chained (2009) dollars, and price indexes are chain-type measures. Each GDP estimate for a quarter (advance, second, and third) incorporates increasingly comprehensive and improved source data; for more information, see "The Revisions to GDP, GDI, and Their Major Components" in the August 2014 SURVEY OF CURRENT BUSINESS. Quarterly estimates are expressed at seasonally adjusted annual rates, which reflect a rate of activity for a quarter as if it were maintained for a year.

2. In this article, "consumer spending" refers to "personal consumption expenditures," "inventory investment" refers to "change in private inventories," and "government spending" refers to "government consumption expenditures and gross investment."

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Chart 1. GDP, Prices, Disposable Personal Income (DPI)



Real GDP Overview

Table 1. Real Gross Domestic Product (GDP) and Related Measures

[Seasonally adjusted at annual rates]

	Share of current-dollar GDP (percent)	Change from preceding period (percent)				Contribution to percent change in real GDP (percentage points)			
	2016	2016				2016			
	IV	I	II	III	IV	I	II	III	IV
Gross domestic product ¹	100.0	0.8	1.4	3.5	2.1	0.8	1.4	3.5	2.1
Personal consumption expenditures	68.9	1.6	4.3	3.0	3.5	1.11	2.88	2.03	2.40
Goods.....	22.2	1.2	7.1	3.5	6.0	0.25	1.51	0.77	1.29
Durable goods.....	7.6	-0.6	9.8	11.6	11.4	-0.05	0.70	0.84	0.82
Nondurable goods.....	14.6	2.1	5.7	-0.5	3.3	0.30	0.80	-0.07	0.47
Services.....	46.7	1.9	3.0	2.7	2.4	0.86	1.37	1.26	1.11
Gross private domestic investment	16.4	-3.3	-7.9	3.0	9.4	-0.56	-1.34	0.50	1.47
Fixed investment.....	16.2	-0.9	-1.1	0.1	2.9	-0.15	-0.18	0.02	0.46
Nonresidential.....	12.3	-3.4	1.0	1.4	0.9	-0.44	0.12	0.18	0.11
Structures.....	2.7	0.1	-2.1	12.0	-1.9	0.00	-0.06	0.30	-0.05
Equipment.....	5.6	-9.5	-2.9	-4.5	1.9	-0.59	-0.17	-0.26	0.11
Intellectual property products.....	4.1	3.7	9.0	3.2	1.3	0.15	0.35	0.13	0.05
Residential.....	3.8	7.8	-7.7	-4.1	9.6	0.29	-0.31	-0.16	0.35
Change in private inventories.....	0.3	.....	.....	.....	.....	-0.41	-1.16	0.49	1.01
Net exports of goods and services	-2.9	.....	.....	.....	.....	0.01	0.18	0.85	-1.82
Exports.....	12.0	-0.7	1.8	10.0	-4.5	-0.09	0.21	1.16	-0.55
Goods.....	7.8	0.1	1.7	14.4	-6.7	0.01	0.13	1.08	-0.55
Services.....	4.2	-2.2	1.9	2.0	-0.1	-0.09	0.08	0.08	0.00
Imports.....	14.9	-0.6	0.2	2.2	9.0	0.09	-0.03	-0.31	-1.27
Goods.....	12.2	-1.3	0.0	0.5	10.9	0.16	0.00	-0.06	-1.25
Services.....	2.7	2.5	1.1	9.8	0.7	-0.07	-0.03	-0.26	-0.02
Government consumption expenditures and gross investment	17.5	1.6	-1.7	0.8	0.2	0.28	-0.30	0.14	0.03
Federal.....	6.6	-1.5	-0.4	2.4	-1.2	-0.10	-0.02	0.16	-0.08
National defense.....	3.9	-3.2	-3.2	2.0	-3.6	-0.13	-0.13	0.08	-0.14
Nondefense.....	2.8	0.9	3.8	3.0	2.3	0.03	0.10	0.08	0.06
State and local.....	10.9	3.5	-2.5	-0.2	1.0	0.39	-0.28	-0.02	0.11
Addenda:									
Gross domestic income (GDI) ².....	.....	0.8	0.7	5.0	1.0	.....	.....	.....	.....
Average of GDP and GDI.....	.....	0.8	1.1	4.3	1.5	.....	.....	.....	.....
Final sales of domestic product.....	99.7	1.2	2.6	3.0	1.1	1.24	2.57	3.03	1.07
Goods.....	29.6	-1.4	2.2	7.6	2.2	-0.42	0.66	2.22	0.67
Services.....	62.4	1.1	2.4	2.1	1.6	0.68	1.48	1.34	0.97
Structures.....	8.0	7.4	-8.7	-0.6	5.7	0.57	-0.73	-0.05	0.44
Motor vehicle output.....	3.0	2.2	7.5	3.2	7.6	0.06	0.21	0.09	0.22
GDP excluding motor vehicle output.....	97.0	0.8	1.2	3.5	1.9	0.77	1.20	3.42	1.87
Final sales of computers.....	0.4	54.3	17.8	-9.0	-3.9	0.18	0.07	-0.04	-0.02
GDP excluding final sales of computers.....	99.6	0.7	1.3	3.6	2.1	0.65	1.34	3.55	2.10
Research and development (R&D).....	2.6	0.6	11.8	-0.1	2.2	0.01	0.29	0.00	0.06
GDP excluding R&D.....	97.4	0.8	1.2	3.6	2.1	0.82	1.12	3.52	2.02

1. The estimates of GDP under the contribution columns are also percent changes.

2. GDI is deflated by the implicit price deflator for GDP.

NOTE: For GDP and its components, percent changes are from NIPA tables 1.1.1 and 1.2.1, contributions to percent change are from NIPA tables 1.1.2 and 1.2.2, and shares are from NIPA table 1.1.10, or they are calculated from table 1.2.5. For GDI, percent changes are from NIPA table 1.7.1.

Real GDP decelerated in the fourth quarter. The deceleration reflected a downturn in exports, an acceleration in imports, a downturn in federal government spending, and a deceleration in nonresidential fixed investment. These movements were partly offset by an acceleration in inventory investment, an upturn in residential investment, an acceleration in consumer spending, and an upturn in state and local government spending.

The acceleration in consumer spending primarily reflected an upturn in spending for nondurable goods that was partly offset by a deceleration in spending for services; the leading contributor to the upturn in spending for nondurable goods was an upturn in spending for "other" nondurable goods (mainly pharmaceuticals, tobacco, and household supplies).

The deceleration in nonresidential fixed investment reflected a downturn in structures and a deceleration in intellectual property products that were partly offset by an upturn in equipment.

The upturn in residential fixed investment primarily reflected an upturn in investment in single-family structures.

The acceleration in inventory investment primarily reflected an acceleration in wholesale trade and upturns in mining, utilities, and construction, and in "other" industries. These movements were partly offset by a deceleration in manufacturing, a larger decrease in retail trade, and a downturn in farm inventories.

The downturn in exports primarily reflected a downturn in goods exports. The downturn in goods exports was mainly attributable to a downturn in exports of foods, feeds, and beverages, reflecting a decrease in exports of soybeans to recent historical levels after an unusually strong increase in the third quarter.

The acceleration in imports reflected an acceleration in goods imports that was partly offset by a deceleration in services imports.

The downturn in federal government spending primarily reflected a downturn in national defense spending.

The upturn in state and local government spending primarily reflected an upturn in gross investment in structures that was partly offset by a deceleration in consumption expenditures.

Revisions to GDP

Table 2. Second and Third Estimates for the Fourth Quarter of 2016

[Seasonally adjusted at annual rates]

	Change from preceding quarter (percent)			Contribution to percent change in real GDP (percentage points)		
	Second estimate	Third estimate	Third estimate minus second estimate	Second estimate	Third estimate	Third estimate minus second estimate
Gross domestic product (GDP) ¹	1.9	2.1	0.2	1.9	2.1	0.2
Personal consumption expenditures	3.0	3.5	0.5	2.05	2.40	0.35
Goods	5.7	6.0	0.3	1.23	1.29	0.06
Durable goods	11.5	11.4	-0.1	0.83	0.82	-0.01
Nondurable goods	2.8	3.3	0.5	0.40	0.47	0.07
Services	1.8	2.4	0.6	0.81	1.11	0.30
Gross private domestic investment	9.2	9.4	0.2	1.45	1.47	0.02
Fixed investment	3.2	2.9	-0.3	0.51	0.46	-0.05
Nonresidential	1.3	0.9	-0.4	0.17	0.11	-0.06
Structures	-4.5	-1.9	2.6	-0.12	-0.05	0.07
Equipment	1.9	1.9	0.0	0.11	0.11	0.00
Intellectual property products	4.5	1.3	-3.2	0.18	0.05	-0.13
Residential	9.6	9.6	0.0	0.35	0.35	0.00
Change in private inventories .....	.....	.....	.....	0.94	1.01	0.07
Net exports of goods and services .....	.....	.....	.....	-1.70	-1.82	-0.12
Exports	-4.0	-4.5	-0.5	-0.50	-0.55	-0.05
Goods	-6.6	-6.7	-0.1	-0.54	-0.55	-0.01
Services	1.0	-0.1	-1.1	0.04	0.00	-0.04
Imports	8.5	9.0	0.5	-1.20	-1.27	-0.07
Goods	10.6	10.9	0.3	-1.21	-1.25	-0.04
Services	-0.4	0.7	1.1	0.01	-0.02	-0.03
Government consumption expenditures and gross investment	0.4	0.2	-0.2	0.06	0.03	-0.03
Federal	-1.2	-1.2	0.0	-0.08	-0.08	0.00
National defense	-3.6	-3.6	0.0	-0.14	-0.14	0.00
Nondefense	2.3	2.3	0.0	0.06	0.06	0.00
State and local	1.3	1.0	-0.3	0.14	0.11	-0.03
Addenda:						
Final sales of domestic product	0.9	1.1	0.2	0.92	1.07	0.15
Gross domestic income (GDI) .....	.....	1.0	.....	.....	.....	.....
Average of GDP and GDI .....	.....	1.5	.....	.....	.....	.....
Gross domestic purchases price index	1.9	2.0	0.1	.....	.....	.....
GDP price index	2.0	2.1	0.1	.....	.....	.....

1. The estimates of GDP under the contribution columns are also percent changes.

The third estimate of the fourth-quarter change in real GDP was 0.2 percentage point higher than the second estimate released in February; the general picture of economic growth remains the same. The average revision from the second estimate to the third estimate for real GDP is 0.2 percentage point. The upward revision to the percent change in real GDP reflected upward revisions to consumer spending and to inventory investment that were partly offset by downward revisions to nonresidential fixed investment and to exports.

The upward revision to consumer spending was primarily to services and reflected upward revisions to spending for “other” services and for recreation services.

The largest contributor to the downward revision to nonresidential fixed investment was a downward revision to intellectual property products that reflected downward revisions to all three components (to software, to research and development, and to entertainment, literary, and artistic originals).

The upward revision to inventory investment primarily reflected an upward revision to manufacturing, which was based on revised Census Bureau data.

Source Data and Methodologies

For the details about the source data and the methodologies that are used for the estimates, see [Concepts and Methods of the U.S. National Income and Product Accounts](#) on BEA’s Web site.

Source data for the third estimate. The third estimate of GDP for the fourth quarter of 2016 incorporated the following source data.

Consumer spending: Census Bureau retail sales data for December (revised) and quarterly services survey data for the fourth quarter (new and revised), Federal Deposit Insurance Corporation Call Report data for the fourth quarter (new), Energy Information Administration electricity and natural gas usage and unit value data for December (revised).

Nonresidential fixed investment: Census Bureau construction spending data for December (revised) and quarterly

services survey data for the fourth quarter (new and revised).

Residential fixed investment: Census Bureau construction spending data for December (revised).

Inventory investment: Census Bureau manufacturers’ and trade inventories for December (revised).

State and local government spending: Census Bureau construction spending data for November and December (revised).

Prices: Bureau of Labor statistics (BLS) export and import prices for October, November, and December (revised), BLS producer price indexes for October, November, and December (revised), and Securities and Exchange Commission FOCUS Report data for the fourth quarter (new).

Corporate Profits

Table 3. Corporate Profits
[Seasonally adjusted]

	Billions of dollars (annual rate)					Percent change from preceding quarter (quarterly rate)				
	Level	Change from preceding quarter								
	2016	2016				2016				
	IV	I	II	III	IV	I	II	III	IV	
Current production measures:										
Corporate profits with IVA and CCAdj.....	2,150.0	66.0	-12.5	117.8	11.2	3.4	-0.6	5.8	0.5	
Domestic industries.....	1,696.0	92.9	-50.5	116.5	-33.9	5.9	-3.0	7.2	-2.0	
Financial.....	519.5	8.1	5.6	50.1	26.5	1.9	1.3	11.3	5.4	
Nonfinancial.....	1,176.5	84.8	-56.1	66.4	-60.4	7.4	-4.6	5.7	-4.9	
Rest of the world.....	454.0	-26.9	38.0	1.3	45.1	-6.8	10.3	0.3	11.0	
Receipts from the rest of the world.....	689.6	8.7	37.5	-1.3	9.1	1.4	5.8	-0.2	1.3	
Less: Payments to the rest of the world.....	235.7	35.6	-0.5	-2.6	-36.0	14.9	-0.2	-0.9	-13.2	
Less: Taxes on corporate income....	538.6	-47.5	16.4	19.5	-24.8	-8.3	3.1	3.6	-4.4	
Equals: Profits after tax.....	1,611.4	113.5	-28.9	98.3	36.0	8.1	-1.9	6.7	2.3	
Net dividends.....	982.0	7.3	-9.3	18.5	9.5	0.8	-1.0	1.9	1.0	
Undistributed profits from current production.....	629.4	106.1	-19.6	79.8	26.5	24.3	-3.6	15.3	4.4	
Net cash flow.....	2,192.1	112.6	-13.4	95.4	20.6	5.7	-0.6	4.6	1.0	

IVA Inventory valuation adjustment

CCAdj Capital consumption adjustment

NOTE: Levels of these and other profits series are shown in NIPA tables 1.12, 1.14, 1.15, and 6.16D.

Profits from current production (corporate profits with inventory valuation adjustment and capital consumption adjustment) increased \$11.2 billion, or 0.5 percent at a quarterly rate, in the fourth quarter after increasing \$117.8 billion, or 5.8 percent, in the third quarter.

Profits of domestic financial corporations increased \$26.5 billion, or 5.4 percent, after increasing \$50.1 billion, or 11.3 percent.

Profits of domestic nonfinancial corporations decreased \$60.4 billion, or 4.9 percent, after increasing \$66.4 billion, or 5.7 percent. The fourth-quarter estimate was reduced by a \$4.95 billion settlement (\$19.8 billion at an annual rate) between a U.S. subsidiary of Volkswagen and the federal and state governments. For more information, see [“What are the effects of the Volkswagen buyback deal on GDP and the national accounts?”](#)

Profits from the rest of the world increased \$45.1 billion, or 11.0 percent, after increasing \$1.3 billion, or 0.3 percent. In the fourth quarter, receipts increased \$9.1 billion and payments decreased \$36.0 billion.

Taxes on corporate income decreased \$24.8 billion, or 4.4 percent, after increasing \$19.5 billion, or 3.6 percent.

Profits after tax with IVA and CCAdj increased \$36.0 billion, or 2.3 percent, after increasing \$98.3 billion, or 6.7 percent.

Measuring Corporate Profits

Corporate profits is a widely followed economic indicator used to gauge corporate health, assess investment conditions, and analyze the effect on corporations of economic policies and conditions. In addition, corporate profits is an important component in key measures of income.

BEA's measure of corporate profits aims to capture the income earned by corporations from current production in a manner that is fully consistent with the national income and product accounts (NIPAs). The measure is defined as receipts arising from current production less associated expenses. Receipts exclude income in the form of dividends and capital gains, and expenses exclude bad debts, natural resource depletion, and capital losses.

Because direct estimates of NIPA-consistent corporate profits are unavailable, BEA derives these estimates in three steps.

First, BEA measures profits before taxes to reflect corporate income regardless of any redistributions of income through taxes. Estimates for the current quarter are based on corporate earnings reports from sources including the

Census Bureau *Quarterly Financial Report*, Federal Deposit Insurance Corporation call reports, other regulatory reports, and tabulations from corporate financial reports. The estimates are benchmarked to Internal Revenue Service (IRS) data when these data are available for two reasons: the IRS data are based on well-specified accounting definitions, and they are comprehensive, covering all incorporated businesses—publicly traded and privately held—in all industries.

Second, to remove the effects of price changes on inventories valued at historical cost and of tax accounting for inventory withdrawals, BEA adds an inventory valuation adjustment that values inventories at current cost.

Third, to remove the effects of tax accounting on depreciation, BEA adds a capital consumption adjustment (CCAdj). CCAdj is defined as the difference between capital consumption allowances (tax return depreciation) and consumption of fixed capital (the decline in the value of the stock of assets due to wear and tear, obsolescence, accidental damage, and aging).

Corporate Profits by Industry

Table 4. Corporate Profits by Industry
[Seasonally adjusted]

	Billions of dollars (annual rate)					Percent change from preceding quarter (quarterly rate)			
	Level	Change from preceding quarter							
	2016	2016				2016			
	IV	I	II	III	IV	I	II	III	IV
Industry profits:									
Corporate profits with IVA	2,251.1	69.5	-12.1	113.7	10.4	3.4	-0.6	5.3	0.5
Domestic industries.....	1,797.2	96.3	-50.1	112.4	-34.7	5.8	-2.8	6.5	-1.9
Financial.....	560.5	7.3	5.4	49.5	26.5	1.5	1.1	10.2	5.0
Nonfinancial.....	1,236.7	89.0	-55.5	62.9	-61.2	7.4	-4.3	5.1	-4.7
Utilities	8.0	15.3	-1.5	5.0	0.5		-37.9	197.3	6.8
Manufacturing	366.1	83.7	-10.5	3.4	-21.3	26.9	-2.7	0.9	-5.5
Wholesale trade.....	111.4	-4.8	-37.8	28.3	-32.9	-3.0	-24.6	24.4	-22.8
Retail trade	188.4	9.8	-3.8	11.5	-4.7	5.6	-2.0	6.3	-2.4
Transportation and warehousing.....	55.9	0.4	-4.8	1.3	-9.1	0.6	-7.0	2.0	-14.0
Information.....	134.2	0.6	2.8	11.2	-6.7	0.5	2.2	8.6	-4.8
Other nonfinancial	372.7	-15.9	0.0	2.3	13.0	-4.3	0.0	0.6	3.6
Rest of the world	454.0	-26.9	38.0	1.3	45.1	-6.8	10.3	0.3	11.0
Addenda:									
Profits before tax (without IVA and CCAdj).....	2,279.8	79.6	102.6	62.2	37.0	4.0	4.9	2.9	1.6
Profits after tax (without IVA and CCAdj).....	1,741.2	127.1	86.2	42.7	61.8	8.9	5.6	2.6	3.7
IVA.....	-28.7	-10.1	-114.7	51.5	-26.6				
CCAdj.....	-101.2	-3.5	-0.4	4.2	0.8				

Profits with inventory valuation adjustment increased \$10.4 billion, or 0.5 percent at a quarterly rate, in the fourth quarter after increasing \$113.7 billion, or 5.3 percent, in the third quarter.

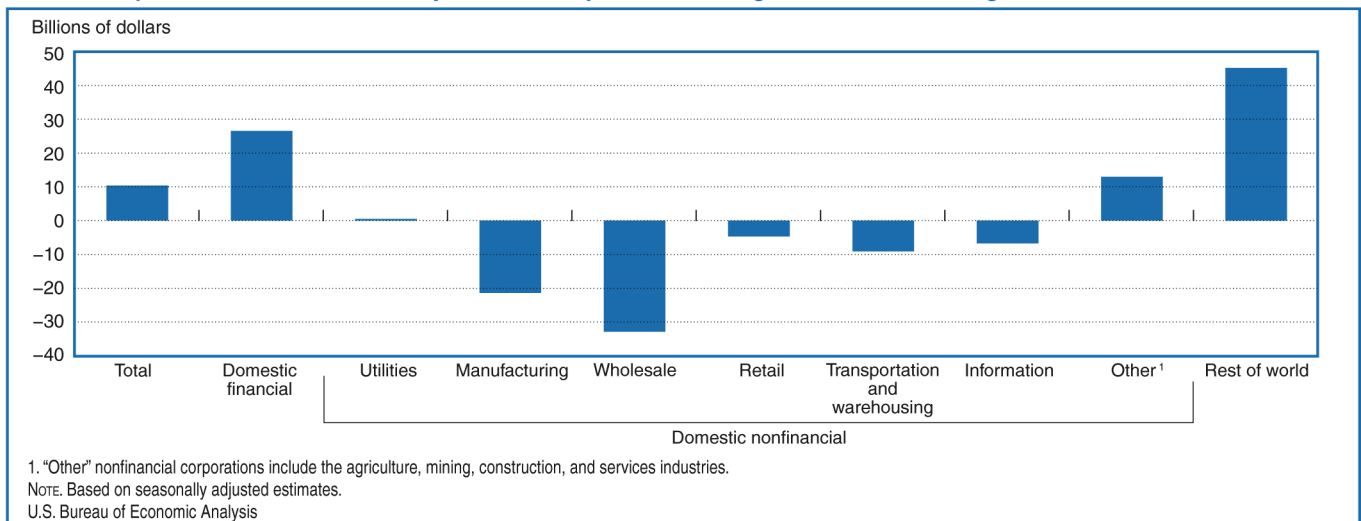
Profits of domestic industries decreased \$34.7 billion, or 1.9 percent, after increasing \$112.4 billion, or 6.5 percent.

Profits of domestic financial industries increased \$26.5 billion, or 5.0 percent, after increasing \$49.5 billion, or 10.2 percent.

Profits of domestic nonfinancial industries turned down, decreasing \$61.2 billion, or 4.7 percent, after increasing \$62.9 billion, or 5.1 percent. The downturn reflected downturns in most industries; the leading contributors were wholesale trade industries and manufacturing (primarily nondurable-goods industries).

IVA Inventory valuation adjustment CCAdj Capital consumption adjustment
NOTE. Levels of these and other profits series are shown in NIPA tables 1.12, 1.14, 1.15, and 6.16D.

Chart 2. Corporate Profits With Inventory Valuation Adjustment: Change From the Preceding Quarter, 2016:IV



Corporate Profits by Industry

Industry profits are corporate profits by industry with inventory valuation adjustment (IVA). The IVA removes the effect of price changes on inventories. The IVA is the difference between the cost of inventory withdrawals at acquisition cost and replacement cost. Ideally, BEA would also add the capital consumption adjustment (CCAdj) for

each industry. However, estimates of the CCAdj are only available for two broad categories: total financial industries and total nonfinancial industries. For more information about BEA's methodology, see "Corporate Profits" in *Concepts and Methods of the U.S. National Income and Product Accounts* on BEA's Web site.